

CLAIMS:

1. A method of synthesizing a signal comprising the steps of:
 - a) providing of a first signal having first periods of a first type and second periods of a second type in an alternating sequence,
 - b) windowing of the first signal to provide a pitch bell for each of the first and second periods,
 - 5 c) determining a number of required pitch bell locations for a second signal to be synthesized,
 - d) selecting of one of the pitch bells for a first one of the required pitch bell locations by identifying the nearest neighboring period of the first one of the required pitch bell locations being of the first type, and selecting of the pitch bell of the identified period,
 - 10 e) selecting of one of the pitch bells for a second one of the required pitch bell locations by identifying a nearest neighboring period of the second one of the required pitch bell locations having the second type, and selecting the pitch bell of the identified period, whereby the steps d) and e) are carried out for all of the required pitch bell locations,
 - 15 f) performing an overlap and add operation on the selected pitch bells in order to synthesize the second signal.
2. The method of claim 1, the first signal having alternating strong and weak periods of substantially the same signal form.
- 20 3. The method of claims 1 or 2, the first signal being a creaky voice signal.
4. The method of claims 1, 2 or 3, whereby the required pitch bell locations are determined in order to increase the duration of the second signal to be synthesized.
- 25 5. A computer program product, in particular digital storage medium, comprising program means for performing the steps of:

- a) providing of a first signal having first periods of a first type and second periods of a second type in an alternating sequence,
- b) windowing of the first signal to provide a pitch bell for each of the first and second periods,
- 5 c) determining a number of required pitch bell locations for a second signal to be synthesized,
- d) selecting of one of the pitch bells for a first one of the required pitch bell locations by identifying the nearest neighboring period of the first one of the required pitch bell locations being of the first type, and selecting of the pitch bell of the identified period,
- 10 e) selecting of one of the pitch bells for a second one of the required pitch bell locations by identifying a nearest neighboring period of the second one of the required pitch bell locations having the second type, and selecting the pitch bell of the identified period, whereby the steps d) and e) are carried out for all of the required pitch bell locations,
- 15 f) performing an overlap and add operation on the selected pitch bells in order to synthesize the second signal.

6. The computer program product of claim 5 the program means being adapted to determine the required pitch bell locations in accordance with a required duration of the
20 second signal to be synthesized.

7. A computer system, in particular text-to-speech synthesis system, comprising:
- means for providing of a first signal having first periods of a first type and second periods of a second type in an alternating sequence,
 - 25 - means for windowing of the first signal to provide a pitch bell for each of the first and second periods,
 - means for determining a number of required pitch bell locations for a second signal to be synthesized,
 - means for selecting of one of the pitch bells for a first one of the required pitch
 - 30 bell locations by identifying the nearest neighboring period of the first one of the required pitch bell locations being of the first type, and selecting of the pitch bell of the identified period, and for selecting of one of the pitch bells for a second one of the required pitch bell locations by identifying a nearest neighboring period of the second one of the required pitch bell locations having the second type, and selecting the pitch bell of the identified period,

- means for performing an overlap and add operation on the selected pitch bells in order to synthesize the second signal

8. The computer system of claim 7 further comprising means for storing of
5 classification data for identifying first and second periods of the first signal.

9. A synthesized signal comprising a number of pitch bells which are overlapped
and added, the pitch bells being of first and second types, the first and second types having
substantially the same signal form and varying amplitudes, the pitch bells being selected to
10 form an alternating sequence of first and second type pitch bells.